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UKRAINIAN SOVIET SOCIALIST REPUBLIC

SUMMARY OF NATIONAL PAPER*

The Ukrainian SSR is a highly developed Soviet socialist republic. The characteristic features of its economy are a powerful iron and steel industry, a ramified engineering industry, a major shipbulding industry, a developed chemical industry and a highly mechanized agriculture. The economy of the pre-revolutionary Ukraine, regarded as an outlying region of the Tsarist empire, was of a one-sided agrarian nature, based principally on manual labour and primitive implements of production.

The Great October Socialist Revolution brought social and national liberation to the Ukrainian people and set the stage for profound qualitative changes in social and political life. During the 60 years of Soviet power, modern branches of industry have come into being and new factories and plants have been set up in the Ukrainian SSR. The Ukraine has become a Republic with a developed industry and intensive agriculture.

Much has been done to increase specialization and concentration of agricultural production, make effective use of land and technology and of the manpower of collective and State farms, and to bring about the application of scientific achievements and progressive knowledge.

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* The designations employed, the presentation of material and the views expressed in this paper are those of the Government of the Ukrainian Soviet Socialist Republics and do not, necessarily reflect the practices and views of the Secretariat of the United Nations in any of these respects.

As a result of the implementation of the social programme, the wages of workers and employees have risen by 40 per cent and those of collective farmers by 60 per cent during the past decade alone. Social consumption funds have more than doubled and significant achievements have been recorded in the development of education, medical services and social security. Housing, social and cultural construction and public services are developing at a rapid rate. Science, culture and art in the Soviet Ukraine are also highly developed.

The experience acquired during the years of Soviet power constitutes incontrovertible proof that the Soviet economic system opens up broad prospects and offers great possibilities of using the results of the scientific and technological revolution for the good of mankind.

The entire Soviet people, including the working people of the Ukraine, are at present engaged in the successful performance of a task of immense historical significance: the gradual integration of the achievements of the scientific and technological revolution with the advantages of the socialist economic system, and the increasingly intensive development of methods - inherent in socialism - of linking science with production.

Socialist society is consistently refining its action-oriented programme that reflects the needs of the people not in opposition to but as an integral part of scientific and technological progress and technico-economic development, and of the solution of problems of communist construction, the development of the political system, the improvement of socialist democracy and the upbringing of the new man.

The fact that the place occupied by science among the other areas of activity in the Republic has changed substantially during the past 25 years reflects a most important socio-economic development. The multisectoral nature of the Ukrainian SSR's economy, the explosive growth of science-intensive sectors and industries which act as trail-blazers for the economy, the diversity of raw material resources, etc., are raising a multitude of problems relating to scientific applications which are being solved with the participation of academic scientific research institutes and mainly of sectoral research, planning and design organizations. Priority is given to the development of the so-called "plant sector" of science, i.e. the research and experimental subdivisions of industrial enterprises. An important role in the achievement of scientific and technological progress is assigned to higher educational establishments in the Republic. The staff of the Ukrainian SSR's 143 higher educational establishments constitute a major scientific potential.

In present conditions when specialist knowledge rapidly becomes outdated, exceptional importance is attached to the development of special units for the retraining of scientific personnel.

Not only is the role of State scientific institutions increasing in importance, but informal research activities enabling specialists of all kinds to participate in creative scientific work are developing successfully.

The organization of science at the centralized planned level in the Ukrainian SSR is the responsibility of the authorities and management bodies. Research planning is one of the most important factors in the implementation of a unified scientific and technical policy within the national economy. Scientific work is planned and entails long-term forecasts (10 to 15 years), five-year plans and annual plans. Planning in science, as in other spheres of activity, is based on the Leninist principle of democratic centralism, which ensures the participation of the broad masses in planning and management.

Methods of controlling and planning scientific and technological progress in the Republic are constantly being improved. In accordance with the decisions of the twenty-fifth Congress of the Communist Party of the Soviet Union and the twenty-fifth Congress of the Communist Party of the Ukraine, practical methods have been evolved for further improving control over scientific and technological progress in the Ukrainian SSR, increasing the effectiveness of scientific research and experimental design work, and speeding up the introduction of the results in industry.

Scientific and production associations represent a progressive new organizational form of combining scientific activity with industrial practice. Within these associations it has proved possible, owing to the elimination of organizational barriers, to reduce the period of development of new technologies by 50 to 66 per cent and to improve the quality and the technical and economic indicators of products. Twenty scientific and production associations are at present active in the Ukrainian SSR.

The sectoral (vertical) organization of science which has come into being in the Ukrainian SSR, as in the rest of the country, has in recent years been supplemented by a regional (horizontal) organization. An integrated system of exercising control over scientific and technological progress is being developed in a number of the Republic's industrial centres.

Conditions for the mass diffusion of scientific achievements throughout the economy are particularly favourable under socialism. The absence of competition, trade secrets and other obstacles to the dissemination of advanced knowledge such as exist in conditions of private ownership, creates an effective framework for the more rapid application of scientific achievements to production.

Preparations are being made in the Republic to embark upon the next organizational stage of associating science with production. The academic scientific and technological associations now being organized on the basis of existing units will be combined in a single research, technical design and production economics structure which will be responsible for all stages of the "research - pilot production - industrial application" process under a start-to-finish plan of operations.

The results of the work of scientists in the Ukrainian SSR are reflected in a multitude of indicators which reveal the Republic's scientific and technological potential. For example, in 1977 alone, 670 models of new types of machines and equipment were developed, 885 new industrial processes introduced, and

125,500 technological innovations applied. These measures were tantamount to releasing 111,000 persons for other work, and the savings they achieved amounted to 754.5 million roubles for the year.

An automated control system for the development of science and technology in the Republic, including subsystems for predicting scientific and technological potential and plan estimates in respect of science and technology, and for controlling the preparation and application of major programmes, is to be developed. An integrated programme of scientific and technological progress in the Ukrainian SSR up to 1990 and beyond has already been prepared. "Basic Guidelines of Social and Economic Development up to 1990 and the Year 2000", important subsections of which include forecasts of the development of science and the practical application of the results, are being elaborated for each region and each major town of the Ukrainian SSR.

The technological modernization of production units has been carried out on a wide scale by the application of scientific and technological achievements.

The Republic's industry is producing special-purpose steam and gas turbines, powerful transformers and rolling mills, steel converters and coal combines, and automobile, railway and aviation engineering has been developed.

The economic consolidation and industrialization of agricultural production and the steady improvement in the material and cultural conditions of agricultural workers have been instrumental in bringing about considerable socio-cultural transformations in rural areas.

Advances in the sphere of public health during the years of Soviet power must be counted among the country's major achievements. The State has assumed responsibility not only for the care but also for protecting the health of the population. The Ukrainian SSR occupies one of the first places among the Union Republics and the economically developed countries of the world as regards the number of hospital beds and doctors. The technical equipment of polyclinics has been increased and their diagnostic and treatment possibilities extended. Scientists at the Republic's medical higher educational establishments and research institutes have developed and introduced a large number of new means of improving the environment and preventing, diagnosing and treating numerous diseases.

The present organization of science in the Ukrainian SSR, taken as a whole, therefore makes it possible to concentrate efforts on key areas of scientific and technological progress and to exercise comprehensive control over the complex and ramified system of research in accordance with the general purposes and objectives of communist construction.